

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.



a 2494

.5

.B5763.B5



# Biotechnology Notes

Volume 5 • Number 5

U.S. Department of Agriculture

May 1992

**Biotechnology Notes**, a compilation of agency activities, news events, and upcoming meetings, is prepared for members of the U.S. Department of Agriculture's (USDA) Committee on Biotechnology in Agriculture (CBA) by USDA's Office of Agricultural Biotechnology (OAB).

## INSIDE USDA

### LOOKING AHEAD: CSRS AND THE PRESIDENTIAL INITIATIVE

USDA's Cooperative State Research Service (CSRS) sponsored an informal discussion April 6 on the impact of three Presidential Initiatives -- biotechnology, advanced materials and processing, and education and human resources -- on CSRS programs. In his introductory remarks, CSRS Administrator John Patrick Jordan said such meetings are intended to keep the staff informed about the latest issues affecting science policy and agricultural research.

Addressing biotechnology, Alvin Young, director of the Office of Agricultural Biotechnology (OAB), described the organizational groundwork that led to that Presidential Initiative and a 1993 fiscal year budget that proposes \$4.03 billion for biotechnology research. He said 12 Federal agencies participated in the biotechnology research effort in areas ranging from the use of microorganisms to clean up the environment to human genome research. He said the budget proposes funding to support risk assessment research for regulatory programs.

Gwen Lewis, special assistant to CSRS's Deputy Administrator in the Office of Higher Education, said the Presidential Initiative on education and human resources will benefit CSRS with support for science education programs that include telecommunications, minority scholarships, and precollege teacher training at Federal laboratories.

Daniel Kugler, CSRS Assistant Deputy Administrator for Special Programs, said the Presidential Initiative on advanced materials and processing will enhance the development and commercialization of industrial materials from vegetable oils, provide support for applied research and development projects for new materials made from paper and wood recycling, and help to fund research on biodegradable starch polymers.

## **CBA REVIEWS PUBLIC INFORMATION PLAN**

USDA's Committee on Biotechnology in Agriculture (CBA) met April 27 to discuss a number of policy issues affecting USDA's oversight of biotechnology. CBA executive secretary Alvin Young presented the Committee with a draft public information plan prepared by members of the Biotechnology Council. The plan calls for an inter-agency approach to the preparation and dissemination of information, thus reducing duplication of effort while enhancing agency output. The CBA approved the plan and recommended immediate implementation.

## **JUNE ABRAC MEETING CANCELED; AUGUST DATE SET**

Both the June 10-12 and the September 23-24 meetings of USDA's Agricultural Biotechnology Research Advisory Committee (ABRAC) have been canceled. Instead, the ABRAC plans to meet August 26-27 in Rosslyn, VA. For more details, please call the OAB at 703-235-4419; Fax: 703-235-4429.

## **COMMUNICATIONS EXPERT BRIEFS COUNCIL**

Steven Burke, Director of Education and Public Affairs at the North Carolina Biotechnology Center, Research Triangle Park, NC, described that Center's communications activities at the April 8 meeting of USDA's Biotechnology Council.

The Center was started in 1981 as a private, non-profit corporation to assist and promote the development of biotechnology in North Carolina. Today, its projects include almost every step along the route to commercialization. In addition, the Center has an on-going program to educate both consumers and science teachers. Its lesson plans were among the first to be developed in the country and continue to serve as a model for educators. To learn more about the Center, call Steven Burke at 919-541-9366.

## **NEW ASSISTANT SECRETARY NOMINATED**

Duane Acker has been nominated USDA's new Assistant Secretary for Science and Education. When confirmed, he will replace former Assistant Secretary, Charles E. Hess, who returned to California in late 1991. Harry Mussman has been Acting Assistant Secretary during the intervening period.

Acker currently holds dual appointments: Administrator of USDA's Foreign Agricultural Service and Acting Administrator of USDA's Office of International Cooperation and Development. A firm date for his Senate confirmation hearing has not yet been set.

## NEWS AROUND THE NATION (AND THE WORLD)

### CORN: INDUSTRIAL FEEDSTOCK OF FUTURE

These days corn is more than animal feed and human food. It has emerged as the feedstock for a range of modern industries, including fuel alcohol, degradable polymers, commodity chemicals, industrial adhesives, and high-tech inks.

At the next Corn Utilization Conference, to be held June 24-26 in St. Louis, MO, more than 400 scientists plan to talk about these and other new developments using corn. The proceedings will be available at a later date. For more information and a registration packet, call Ann Beirne of the National Corn Growers Association (NCGA) at 314-275-9915. The conference is co-sponsored by the NCGA and by Ciba-Geigy Seed Division.

### SNAKE VENOM BEING STUDIED

Scientists at Harvard University and Genentech Corp. of San Francisco, CA, have made a molecular map of the poison from the Malayan pit viper. They hope to use the venom to develop a new natural blood-thinner. The therapeutic potential of venom from the southeastern pygmy rattlesnake is being studied by Cor Therapeutics, also located in the San Francisco Bay area.

### A DIALOGUE IN DUBLIN

Forty experts in science communications (20 from the United States; 20 from the European Communities) exchanged views and developed recommendations on methods of communicating biotechnology with the public, March 22-25, in Dublin, Ireland. The meeting was organized by the U.S.-EC Task Force on Biotechnology Research and hosted by BioResearch Ireland. Prior to the workshop, participants prepared statements that addressed the issue of obstacles that impede effective communications.

The meeting was structured around five subgroups that discussed: the role of the media, the role of the scientist, the role of citizens' groups, the role of educators, and the role of government organizations. Each subgroup explored the issues and then shared its findings with other participants at a number of plenary sessions spaced throughout the program.

Once the recommendations have been fine-tuned, they will be forwarded to the U.S.-EC Task Force on Biotechnology Research, the

committee which authorized the Dublin workshop. The Task Force is co-chaired by Mary Clutter of the National Science Foundation and by P. Fasella of the European Communities, DGXII. Its next meeting is scheduled for October 21-23 in Airlie, VA.

## **BIOPULPING CARVES OUT ITS OWN NICHE**

Five years ago USDA's Forest Products Laboratory in the Forest Service formed the Biopulping Consortium to study the feasibility of using fungi to partially degrade wood chips before refining. The process was called biopulping. Last month the scientists who participated reported on the success of biopulping. "Their research has defined the state-of-the-art for using biotechnology in pulp and paper processing," said Forest Products Laboratory Director John Erickson.

Within two to three years the researchers demonstrated the technical feasibility of biopulping and showed that paper produced via biopulping proved to be significantly stronger than conventionally produced paper. Knowledge gleaned from the research may one day improve the usability of recycled fibers and eliminate or reduce the need for environmentally hazardous bleaching methods. To learn more about the Consortium, call Debra Dietzman at 608-231-9239.

## **TRIVIAL PURSUIT**

Just what *is* one part per million, anyway? That's the question posed by Karch and Associates Inc, a Washington, DC environmental consulting firm, and here is what they found out.

One part per million is the same as . . . one inch in 16 miles . . . one minute in two years . . . a one-gram needle in a ton of hay . . . one penny in \$10,000 . . . one large mouthful of food in comparison with how much a person consumes in a lifetime . . . one drop of vermouth in 80 fifths of gin or vodka.

## **FDA ANNOUNCES MAJOR BIOTECH INITIATIVE**

David Kessler, Commissioner of the Food and Drug Administration (FDA), announced on March 5 that the agency plans to hire 50 reviewers for biotech products to help speed new drugs and biologicals to the marketplace. Kessler said he also plans to streamline the review process. In addition, the FDA will build a new biotech research center on the campus of the National Institutes of Health (NIH) to train reviewers and to conduct

independent research evaluating AIDS therapies and products of biotechnology.

## IBA SUPPORTS NIH PATENT FILINGS

According to the March issue of *IBA Reports*, the Industrial Biotechnology Association (IBA) gives "conditional support" to the NIH recent filing of patents on several hundred newly-developed gene sequences. IBA said the patent filing was "the only way in which the new technology could be protected from foreign patent infringement and inappropriate technology transfer." IBA said the NIH should next explore licensing possibilities so private companies can use the sequences in commercial products.

## IN CASE YOU WEREN'T THERE

### THE NATIONAL TECHNOLOGY INITIATIVE

On February 12, 1992, President Bush launched the National Technology Initiative to help promote U.S. industry's use of technology to strengthen the domestic economy and compete in global markets. One facet of that program is a series of conferences being held around the country. These conferences bring together business, government, and university leaders to discuss opportunities for cooperation and to raise industry awareness of government-sponsored programs, services, and laboratories.

On April 9, North Carolina State University hosted the fourth conference in a series of 10. USDA's OAB was invited to display the Department's biotechnology exhibit and explain its programs involving the transfer of biotechnology from universities and Federal laboratories to the private sector.

The conference included a workshop on "Partnerships for Biotechnology," chaired by USDA acting assistant secretary for science and education, Harry C. Mussman. In his introductory remarks, Mussman said USDA has over 200 CRADA's (Cooperative Research and Development Agreements) in place linking the Agricultural Research Service and industry, plus about another 40 between the USDA's Forest Service and private firms. He said USDA's CRADA's make up about one-fourth of all those negotiated between the Federal government and the private sector. He also explained how USDA accomplishes technology transfer through its Office of Cooperative Interactions.

To learn more about the National Technology Initiative or about future conferences, please call Mat Heyman, Chief of Public Affairs, National Institute of Standards and Technology, at 301-975-2762; Fax: 301-926-1630. For further information about USDA's technology transfer programs, please call James T. Hall, national technology transfer coordinator, at 301-504-5345; Fax: 301-504-5060.

## NEW PUBLICATIONS

- Minutes of two USDA ABRAC meetings are now available. Both the December 2, 1991 classification and confinement working group and the December 3-4 full committee meeting may be ordered from the OAB by calling 703-235-4419; Fax: 703-235-4429.
- *Bovine Somatotropin and Emerging Issues: An Assessment*, edited by Milton C. Hallberg, professor of agricultural economics, Pennsylvania State University. 1992. \$44.50. To order write to Westview Press, 5500 Central Ave., Boulder, CO 80301-2847.
- *Good Laboratory Practice Standards: Applications for Field and Laboratory Studies*. Edited by W. Y. Garner, M. S. Barge, and J. P. Ussary. Published by the American Chemical Society. February 1992. \$89.95. To order call 1-800-ACS-5558.

## UPCOMING MEETINGS

**May 11-14:** Second International Symposium on the Biosafety Results of Field Tests of Genetically Modified Plants and Microorganisms. Goslar, Germany. Call the OAB at 703-235-4419; Fax 703-235-4429.

**May 11-15:** The 14th Symposium on Biotechnology for Fuels and Chemicals. Gatlinburg, TN. For details call Jonathan Woodward at 615-436-4194.

**May 17-20:** The Association of Biotechnology Companies' Sixth International Biotechnology Meeting. San Diego, CA. Call 202-234-3330; Fax: 202-234-3565.

**May 21-22:** Public meeting on science and technology transfer issues related to Federally funded genome research. Sponsored by USDA, the Department of Commerce, the Department of Energy, the Department of Health and Human Services, the Department of State, the National Science Foundation, and the Office of Science and

Technology Policy. The meeting takes place in the auditorium of the National Academy of Sciences, 2100 C Street, N.W., Washington, DC and begins at 8:30 a.m. To register or for more information, call Sandra Beaulieu by May 14 at 615-576-7393. On-site registration will also be held.

**May 27-29:** "Animal Biotechnology: Challenges and Opportunities." College Station, Texas. The meeting is sponsored by the National Agricultural Biotechnology Council. Call 607-254-4859; Fax: 607-255-2428.

**May 28:** National Technology Initiative, Pasadena, CA. Call 301-975-2170 for more details.

-----

**June 9-10:** "Food Issues and Challenges: Regulation, Enforcement and Technology." Arlington, VA. The meeting is sponsored by *Food and Drink Daily*. To register, please call 202-638-4260; Fax: 202-662-9719.

**June 10-12:** Midwest Biotechnology Symposium '92. University of Iowa. Iowa City. Call Bev Palmer at 319-335-8764.

**June 14-17:** 1992 International Biotechnology Conference on Food and Biotechnology. Baltimore, MD. For details send a fax to Laura Kurie at 410-913-0351.

**June 14-17:** ECO World '92 Conference and Exhibit. Washington, DC Convention Center. Sponsored by the American Society of Mechanical Engineers. For details call 1-800-843-2763 ext. 575 or send a fax to 212-705-7173.

**June 20-24:** "Molecular Crop Agriculture for the Pacific Rim" is the topic of the first conference in a series of the University of California, Davis-Pacific Rim Food and Agricultural Biotechnology Conference Series. Sacramento, CA. For details call Carolyn Norlyn at 916-757-3331; Fax: 916-757-7943.

**June 20-25:** 1992 World Congress on Cell and Tissue Culture. Crystal City, VA. For details please call 410-992-0946.

**June 24-26:** Corn Utilization Conference. St. Louis, MO. Co-sponsored by the National Corn Growers Association and Ciba-Geigy Seed Division. Call 314-275-9915.

-----

**July 14-22:** First International Crop Science Congress. Ames, Iowa. For more information call Iowa State University at 515-294-0706.

**Aug. 16-21:** Ninth International Biotechnology Symposium and Exposition entitled "Harnessing Biotechnology for the 21st Century." Crystal City, VA. Hosted by the American Chemical Society. For details call 202-872-4485; Fax: 202-872-6067.

**Aug. 24-28:** International Symposium on Population Genetics and Gene Conservation of Forest Trees. Bordeaux, France. Sponsored by the International Union of Forestry Research Organizations. For details write to P. H. Baradat, INRA, B.P. 45 33611, Gazinet Cedex, France; or call 33-56-68-03-13; Fax: 33-56-68-02-23.

**Aug. 26-27:** Meeting of USDA's ABRAC. Rosslyn, VA. For more details please call the OAB at 703-235-4419; Fax: 703-235-4429.

-----

**Sept. 24-25:** Sixth Forum for Applied Biotechnology. Brugge, Belgium. Call for papers. Organized by the faculty of agricultural sciences of the University of Gent and by the Regional Development Authority of West Flanders.

\*\*\*\*\*

**Biotechnology Notes** is written by Marti Asner, public affairs specialist in USDA's Office of Agricultural Biotechnology. Suggestions for future issues are always appreciated and may be sent to USDA/OAB, Room 1001, Rosslyn Plaza East, 14th and Independence Ave., S.W., Washington, DC 20250-2200. Phone: 703-235-4419; Fax: 703-235-4429.